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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/707,487

12/17/2003

John C. Tsai

60154.302101

1486

32112

7590

12/29/2005

INTELLECTUAL PROPERTY LAW OFFICE  
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EXAMINER

RAEVIS, ROBERT R

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/707,487	TSAI, JOHN C.	
	Examiner	Art Unit	
	Robert R. Raevis	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

Claims 1-9,11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 4, this claim relates to combining the features of the measurement system (i.e. claim 1) with features of Prior Art Figure 2 as explained on p. 9, first full paragraph, of REMARKS. There is no support for this combination.

As to claim 5, this claim relates to combining the features of the measurement system (i.e. claim 1) with features of Prior Art Figure 2 as explained on p. 9, first full paragraph, of REMARKS. There is no support for this combination.

As to claims 1,19,20, the written specification does not employ either the term "tool" or "machine", yet Applicant states that both of those terms provide for allowable claims. Where is the term "machine tool" defined in the written specification? How are stages employed in "many manufacturing and laboratory processes" more broadly (if that's the case) characterized as "machine tools"? After all, the disclosed stages are not depicted as being tools being utilized on a machine.

Claims 1-9,11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

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which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claims 1,19,20, what does "machine tool stage" mean, and how is it used? Does it mean that the stage by itself is both a "machine" and a "tool", or does it mean that the "stage" is somehow used as a tool on a machine, or does it mean something else? If it means the second possibility, what might that machine tool be?

Claims 1-9,11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 4, this claim is not consistent with claim 1, as claim 1 states that the stage has a first and second piece (i.e. two pieces for the same single stage), while claim 4 refers additional identical stages (i.e. "said stages", on line 2) that *are in fact not identical*, as some of those "said stages" includes the "same" first piece. In effect, claim 4 seemingly is removing a limitation from claim 1 which states that a stage has both a first and second piece, while claim 4 suggests not. Clearly, the "plurality of said stages" (line 2) is not a plurality of the "stage" (claim 1, line 1) as defined in claim 1.

As to claims 1,19,20, what does "machine tool" refer to in the written specification and/or drawings? What does the term "machine tool" mean? Is the "stage" by itself a "machine tool", or is the stage to be used with a "machine tool"?

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the stage (of claim 1) that has two pieces that share the same scale (of claim 4), a system that includes the stage (of claim 1) with multiple stages and thus multiple displays and sensors (as in claim 5) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claims 1,2,12,14,15,18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Falk et al '691.

Falk et al teach a system including: stage having first 100 and second 16 pieces; scale 102 integrated in the first piece; detector and display 32 integrated in the second piece. The signals created by the scale 102 are counted. The sensor is optical, and the device includes a "reset " (col. 3, line 26). The system is a machine employed as a tool for fishing. A solar cell 78 (or in the alternative, latchable top section 20) are above elements 100 and 16, which two elements thus serve as a stage for the cell (or in the alternative, the latchable top section 20).

Claims 5,6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al.

As to claims 5,6, it would have been obvious for an individual to employ two of Falk's fishing poles at the same site to double the chances of catching a fish. Such a dual pole system results in a measurement system that has two stages, each having a different axis, and thus collectively multiple axes for the system.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al as applied to claim 1 above, and further in view of either Ozawa or Bicking.

As to claim 13, it would have been obvious to employ either filter or amp in Falk's detector signal line because either Ozawa (element 4) or Bicking (elements 96,98) teach that sensor output signals benefit from such circuitry to effectively pass data (filter out noise, serve as a preamp) to a computation circuit.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al as applied to claim 1 above, and further in view of Myers et al.

As to claim 17, it would have been obvious to employ microprocessor between Falk's display and sensor because Myers et al teach (Figure 3 that a microprocessor may effectively process position data to control a display.

Claims 3, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al as applied to claim 1 above, and further in view of Helmricks.

Falk teaches (Figure 1) a system, and also (col. 1, lines 40-50) estimating distance with a rotational sensor.

As to claims 3 and 11, it would have been obvious to employ a rotationally sensitive element on the reel 14 of Falk because Helmrich teaches use of a wheel 14/46 to measure rotation of an element. It would also have been obvious to employ Falk's sensor/display system with the wheel because Falk teaches that the sensors and display may be integral to allow for a compact measuring system.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Falk et al as applied to claim 1 above, and further in view of Helmrichs, Schwabe and Nelle.

Comments that exist above regarding claim 3 similarly apply here. In addition, it would have been obvious to employ scale along the rotational arc of Helmrichs wheel because Schwabe teaches (Figure 6) locating scales along an arc to effectively measure rotational displacement. It would have been obvious to employ tape as the scale because Nelle teaches (col. 1, lines 2-30) that tape effectively allows for securing a scale to a measuring instrument.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al '491 in view of Nelle.

Sasaki et al teach (Figure 3A) a system employing a stage having first (left hand element) and second (right-hand element) pieces, the first having a scale and the second having display and sensor. There appear to be buttons on the top surface of the second piece, the buttons being supported by the stage, but if not, it would have been obvious to employ buttons on the top of the stage to allow a user to quickly turn

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the unit on. (In the alternative, the stage does support a user's hand.) The stage is a machine, and serves as a tool. In the alternative, the stage may be used to measure displacement of a machine tool.

Sasaki does not employ tape.

As to claims 7 and 8, it would have been obvious to employ tape as the scale because Nelle teaches (col. 1, lines 2-30) that tape effectively allows for securing a scale to a measuring instrument. Also, Sasaki's "periodic pattern" (ABSTRACT) suggests a digital scale, but if not, it is known to apply either reflective or optical (col. 3, line 29) markings in a manner to permit for a counter to measure distance.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki et al in view of Bezing et al.

Sasaki et al teach (Figure 3A) a system employing a stage having first (left hand element) and second (right-hand element) pieces, the first having a scale and the second having display and sensor.

Sasaki does not employ a port for an outside system.

As to claim 16, Sasaki's "periodic pattern" (ABSTRACT) suggests a digital scale, but if not, it is known to apply either reflective or optical (col. 3, line 29) markings in a manner to permit for a counter to measure distance. In addition, it would have been obvious to employ an port to pass data to a computerized outside system as Bezing et al teaches (col. 4, lines 40-47) directly passing data from a caliper to a personal



computer, to avoid the unnecessary step of manual entry of such data into the computer.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raemis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 7am to 4pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Rowley*

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